

4 November 1964

Declass Review by NGA.

TRIP REPORT

Place: [REDACTED]

Date: 14 October 1964

SUBJECT: CONTRACT [REDACTED] "High Resolution Step & Repeat Printer" and
a "Contact Duplicating and Reseau Printer"

CONTACT: [REDACTED]

The subject contract is in two parts covering a "High Resolution Step & Repeat Printer" and a "Contact Duplicating and Reseau Printer," with [REDACTED] as the prime contractor. The hardware portion of the Reseau printer is being carried out by [REDACTED] under a subcontract.

A crude breadboard printer has been assembled by [REDACTED] and is in operation. It incorporates a 9½" x 30" format, electric particle clutch drives for the negative and raw stock, an inflatable-deflatable air bag pressure platen and a simulated light source, all supported by an angle-aluminum frame. The breadboard provides an excellent base for testing a variety of operating mechanisms. [REDACTED] has proposed several new features. The most unique is the air bag pressure platen which is a rapidly inflatable and deflatable rubber balloon that applies pressure to the printer aperture from the center out. Its pressure can be adjusted to any degree desired. [REDACTED] refers to this feature as the huff and puff action.

The proposed drives will have a sinusoidal action. From the demonstration it appears that the required 10 frames per minute can be extended to 15 or 18 frames per minute. The frame edge will be sensed by a row of grain-of-wheat lamps. The light source will probably be multiple (approximately 150) sealed beam lamps, each with a modified condenser lens. Exposure control will be accomplished by sensors reading through the platen, negative, and raw stock with length-wise exposure control only, to satisfy the AMS requirement.

In general, the writer was quite impressed by the ingenuity, resourcefulness, and mechanical capability of [REDACTED]. The company employs only 32 persons but appears to be quite capable. It would be well to consider them for other jobs of similar nature, such as for modification of the [REDACTED] enlarger.

[REDACTED]

Development Branch, P&DS